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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/578,942	05/25/2000	William Lui	M-8369 US	7134

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EXAMINER

NGUYEN, PHUOC H

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 02/04/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

PRG

Office Action Summary	Application No.	Applicant(s)	
	09/578,942	LUI, WILLIAM	
	Examiner	Art Unit	
	Phuoc H. Nguyen	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-33 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 8-12, 14, 17-21, 23, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 4, 6, 7, 13, 15, 16, 22, 24 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/November 21, 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment A, filed 11/21/2003.
2. Claims 1-33 are pending in this application. Claims 1, 10, 19, and 28-33 are independent claims. In the Amendment A, claims 28-33 are newly added. This action is made final.

Response to Arguments

3. Applicant's arguments filed 11/21/2003 have been fully considered but they are not persuasive.

The applicant argues in page 11 that the cited reference does not disclose one or more modified frame relay sub-interface entities internal to at least one network router with one or more corresponding data link layer entities internal to at least one unit under test.

The examiner respectfully submits that based on the claim language; Figure 1 discloses the structure of claim 1. The modified frame relay is known in the art wherein the network router is a basis component in networking cloud for directing frame/cell/packet from one place to another place. These network routers are known in the art that is capable of operating in the last three layers including the data link layer.

The applicant argues in page 12 that the reference does not disclose at least one or more modified frame relay sub-interface entities logically coupled with at least one decryption-encryption service.

The examiner respectfully submits that the processes of transmitting data from one sub-network to different sub-network must require a translation is known in the art. The translation for a frame of frame relay to IP packet of IP protocol would require a translation or encryption/decryption such as encapsulation/decapsulation from frame relay to IP or vice versa.

Claim Objections

4. Claims 4, 6, 7, 13, 15-16, and 28-33 are objected to because of the following informalities:

The limitations cited in new added claims 28-33 are exactly the same as the limitations cited in the claims 4, 6, 7, 13, and 15-16 respectively. Thus, the applicant is advised to remove or cancel either claims 4, 6, 7, 13, and 15-16 or claims 28-23 due to duplication of claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3, 9-12, 18-21, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Natarajan et al. (U.S. 6,304,546).
7. Referring to claims 1, 10, and 19, Natarajan reference disclose coupling one or more modified frame relay sub-interface entities (Figure 1, (120)) internal to at least one network router (Figure 1, (112)) with one or more corresponding data link layer entities internal to at least one unit under test (Figure 1, node (110); and col. 2, lines 40-52).

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8. Referring to claims 2,11, and 20, Natarajan reference disclose the unit under test is a computer system (col. 2, lines 29-37).

9. Referring to claims 3,12, and 21, Natarajan reference disclose connecting at least one physical data link between the at least one network router and the at least one unit under test (col. 2, lines 53-65).

10. Referring to claims 9,18, and 27, Natarajan reference disclose coupling at least one of the one or more modified frame relay sub-interface entities with at least one network layer entity (Figure 1, router).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 5,14, and 23 are rejected under 35 U.S.C. 103(a) as being obvious over Natarajan in view of Lemler et al. (U.S. 6,546,420).

Natarajan reference disclose coupling one or more modified frame relay sub-interface entities internal to at least one network router with one or more corresponding data link layer entities internal to at least one unit under test; however, Natarajan fail to teach connecting at least one aggregation unit between the at least one network router and the at least one unit under test. Lemler reference disclose connecting at least one aggregation unit between the at least one network router and the at least one unit under test (Figure 1b; and col. 6, lines 30-51). It would

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have been obvious to one of the ordinary skill in the art at the time of the invention was made to incorporate Lemler's teaching into Natarajan's method to apply the aggregation unit between router and workstation; as a result, this will improve an efficiency of the network flow.

13. Claims 8, 17, and 26 are rejected under 35 U.S.C. 103(a) as being obvious over Natarajan in view of Sadjadi ("CTE Announces World's First Frame Relay Data Communication Device with Compression, Encryption, and TI/EI features").

Natarajan reference disclose coupling one or more modified frame relay sub-interface entities internal to at least one network router with one or more corresponding data link layer entities internal to at least one unit under test; however, Natarajan fail to teach at least one or more modified frame relay sub-interface entities logically coupled with at least one decryption-encryption service. Sadjadi reference disclose at least one or more modified frame relay sub-interface entities logically coupled with at least one decryption-encryption service (page 2, 1st paragraph). It would have been obvious to one of the ordinary skill in the art at the time of the invention was made to incorporate Sadjadi's teaching into Natarajan's method to apply the decryption-encryption service to frame relay; as a result, this allows for secure communication over frame relay networks.

Allowable Subject Matter

14. Claims 4, 6-7, 13, 15-16, 22, and 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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15. Claims 28-33 are allowed.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H. Nguyen whose telephone number is 703-305-5315. The examiner can normally be reached on Mon -Thu (7AM-4:30PM) and off every other Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 703-308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc H. Nguyen
Examiner
Art Unit 2143

February 3, 2004


DAVID WILEY
SUPERVISORY PATENT EXAMINER
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